lightly tinted transparent state. Using different dyes can yield different colors. The following is a list of the dyed mixtures for the colored PSCT device.--

In the claims:

Please cancel claims 68-82, and 90-92 without prejudice or disclaimer.

Presented below are the claims pending after entry of the present amendment:

C3

Sub D1

41. (Amended) An electro-optical glazing structure comprising:

an electro-optical glazing panel including liquid crystal material interposed between a pair of optically-transparent substrates, said electro-optical glazing panel having an electrically-switchable scattering mode of operation and electrically-switchable transmission mode of operation; and

an optical state switching mechanism for electrically-switching said electro-optical glazing panel into said electrically-switchable scattering mode of operation and into said electrically-switchable transmission mode of operation,

wherein the liquid crystal material comprises a PSCT liquid crystal material including a chiral liquid crystal and a monomer, the monomer lacking the mesogenic group of the general formula:

$[Si(CH_3)O]_n$.

42. The electro-optical glazing structure of claim 41, which has total-scattering and total-transmission modes of operation for improved control over the flow of electromagnetic radiation within the solar region of the electromagnetic spectrum.

43. The electro-optical glazing structure of claim 42, in which the modes of operation avoid the use of energy absorbing mechanisms.

44. The electro-optical glazing structure of claim 42 which has a broad band of operation, including the near-IR, visible and near-UV portions of the electromagnetic spectrum.

45. The electro-optical glazing structure of claim 41, wherein the optically transparent substrates comprise float-glass.

D1
C3
Cont'd

46. (Amended) An electro-optical glazing structure comprising:

an electro-optical glazing panel including liquid crystal material interposed between a pair of optically-transparent substrates, said electro-optical glazing panel having an electrically-switchable scattering mode of operation and electrically-switchable transmission mode of operation; and

an optical state switching mechanism for electrically-switching said electro-optical glazing panel into said electrically-switchable scattering mode of operation and into said electrically-switchable transmission mode of operation,

wherein the liquid crystal material comprises a chiral liquid crystal and ethylene glycol dimethacrylate.

47. The electro-optical glazing structure of claim 46, which has total-scattering and total-transmission modes of operation for improved control over the flow of electromagnetic radiation within the solar region of the electromagnetic spectrum.

48. The electro-optical glazing structure of claim 47, in which the modes of operation avoid the use of energy absorbing mechanisms.

49. The electro-optical glazing structure of claim 47 which has a broad band of operation, including the near-IR, visible and near-UV portions of the electromagnetic spectrum.

50. The electro-optical glazing structure of claim 46, wherein the optically transparent substrates comprise float-glass.

D1 C3 Cont'd

51. (Amended) An electro-optical glazing structure comprising:

an electro-optical glazing panel including liquid crystal material interposed between a pair of optically-transparent substrates, said electro-optical glazing panel having an electrically-switchable scattering mode of operation and electrically-switchable transmission mode of operation; and

an optical state switching mechanism for electrically-switching said electro-optical glazing panel into said electrically-switchable scattering mode of operation and into said electrically-switchable transmission mode of operation,

wherein the liquid crystal material comprises a chiral liquid crystal and a monomer selected from the group consisting of ethylene glycol dimethacrylate, urethane acrylates having a viscosity of about 300 to about 400 centipoise, and epoxies having a viscosity of about 1400 to about 1800 centipoise, and combinations comprising at least one of the foregoing monomers.

52. The electro-optical glazing structure of claim 52, which has total-scattering and total-transmission modes of operation for improved control over the flow of electromagnetic radiation within the solar region of the electromagnetic spectrum.

53. The electro-optical glazing structure of claim 52, in which the modes of operation avoid the use of energy absorbing mechanisms.

54. The electro-optical glazing structure of claim 52 which has a broad band of operation, including the near-IR, visible and near-UV portions of the electromagnetic spectrum.

55. The electro-optical glazing structure of claim 51, wherein the optically transparent substrates comprise float-glass.

P1 C3 Cmx3

56. (Amended) An electro-optical glazing structure comprising:

an electro-optical glazing panel including liquid crystal material interposed between a pair of optically-transparent substrates, said electro-optical glazing panel having an electrically-switchable scattering mode of operation and electrically-switchable transmission mode of operation; and

an optical state switching mechanism for electrically-switching said electro-optical glazing panel into said electrically-switchable scattering mode of operation and into said electrically-switchable transmission mode of operation,

wherein the liquid crystal material comprises a PSCT liquid crystal material including a chiral liquid crystal, a monomer and a dichroic dye.

57. The electro-optical glazing structure of claim 56, which has total-scattering and total-transmission modes of operation for improved control over the flow of electromagnetic radiation within the solar region of the electromagnetic spectrum.

58. The electro-optical glazing structure of claim 57, in which the modes of operation avoid the use of energy absorbing mechanisms.

59. The electro-optical glazing structure of claim 57 which has a broad band of operation, including the near-IR, visible and near-UV portions of the electromagnetic spectrum.

60. The electro-optical glazing structure of claim 56, wherein the optically transparent substrates comprise float-glass.

61. (Amended) The electro-optical glazing structure of claim 56, wherein said dichroic dye is an anthraquinone dye.

D1 C3 End

62. (Amended) An electro-optical glazing structure comprising:

an electro-optical glazing panel including liquid crystal material interposed between a pair of optically-transparent substrates, said electro-optical glazing panel having an electrically-switchable scattering mode of operation and electrically-switchable transmission mode of operation; and

an optical state switching mechanism for electrically-switching said electro-optical glazing panel into said electrically-switchable scattering mode of operation and into said electrically-switchable transmission mode of operation,

wherein the liquid crystal material comprises a chiral liquid crystal, a monomer and a surfactant.

63. The electro-optical glazing structure of claim 62, which has total-scattering and total-transmission modes of operation for improved control over the flow of electromagnetic radiation within the solar region of the electromagnetic spectrum.

64. The electro-optical glazing structure of claim 63, in which the modes of operation avoid the use of energy absorbing mechanisms.

65. The electro-optical glazing structure of claim 63 which has a broad band of operation, including the near-IR, visible and near-UV portions of the electromagnetic spectrum.

66. The electro-optical glazing structure of claim 62, wherein the optically transparent substrates comprise float-glass.

67. The electro-optical glazing structure of claim 62, wherein said surfactant comprises Poly (Dimethylsiloxane).

Sub D1 C4

83. (Amended) A liquid crystal material for an electro-optical glazing structure comprising a PSCT liquid crystal material including a chiral liquid crystal and a monomer, the monomer lacking the mesogenic group of the general formula:

$[Si(CH_3)O]_n$.

84. (Amended) A liquid crystal material for an electro-optical glazing structure comprising a chiral liquid crystal and ethylene glycol dimethacrylate.

CY D1 End

85. (Amended) A liquid crystal material for an electro-optical glazing structure comprising a chiral liquid crystal and a monomer selected from the group consisting of ethylene Glycol glycol Dimethacrylate dimethacrylate(EGD), urethane acrylates having a viscosity of about 300 to about 400 centipoise, and epoxies having a viscosity of about 1400 to about 1800 centipoise, and combinations comprising at least one of the foregoing monomers.

86. A liquid crystal material for an electro-optical glazing structure comprising a PSCT liquid crystal material and a dichroic dye.

87. (Amended) The liquid crystal material of claim 86, wherein said dichroic dye is an anthraquinone dye.

88. (Amended) A liquid crystal material for an electro-optical glazing structure comprising a chiral liquid crystal, a monomer, and a surfactant.

89. The liquid crystal material of claim 88, wherein said surfactant comprises Poly (Dimethylsiloxane).

Marked Version Showing Changes

41. (Amended) An electro-optical glazing structure comprising:

an electro-optical glazing panel including liquid crystal material interposed between a pair of optically-transparent substrates, said electro-optical glazing panel having an electrically-switchable scattering mode of operation and electrically-switchable transmission mode of operation; and

an optical state switching mechanism for electrically-switching said electro-optical glazing panel into said electrically-switchable scattering mode of operation and into said electrically-switchable transmission mode of operation,

wherein the liquid crystal material comprises a PSCT liquid crystal material <u>including a chiral liquid crystal and a monomer, the monomer</u> lacking the mesogenic group of the general formula:

$[Si(CH_3)O]_n$.